

REMARKS

Claims 14-16 and 18-22 are pending.

Claims 15-20 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants have amended canceled the claims on the points noted by the Examiner.

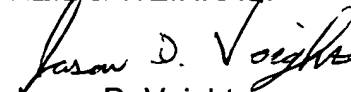
Claims 14-22 stand rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dever et al. (US 6,262,310). Applicants respectfully traverse this rejection. The Examiner argues that Dever et al. anticipates the instant claimed invention when R₅₋₆ is hydroxyalkyl. Applicants have amended claim 14 to exclude such a substituent.

A check in the amount of \$920.00 is attached to cover the required three month extension fee.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

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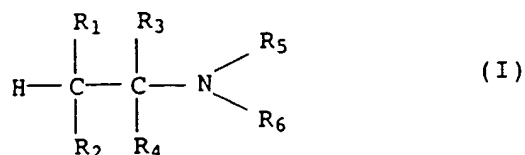
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please cancel claim 17.

Please amend the claims as follows:

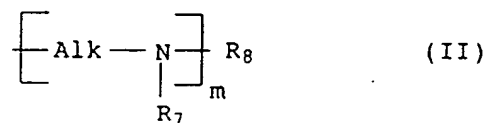
14. (amended) A polyalkene amine which is substantially free of halides and has the formula (I)



where

R₁, R₂, [R₂] R₃ and R₄, independently of one another, are each hydrogen or an unsubstituted or substituted, saturated or mono- or polyunsaturated aliphatic radical having a number-average molecular weight of up to 40000, at least one of the radicals R₁ to R₄ having a number average molecular weight of from 150 to 40000, and

R₅ and R₆, independently of one another, are each hydrogen, alkyl, cycloalkyl, [hydroxyalkyl,] aminoalkyl, alkenyl, alkynyl, aryl, arylalkyl, alkylaryl, hetaryl or an alkyleneimine radical of the formula (II)



where

Alk is a straight-chain or branched alkylene,

m is an integer from 0 to 10, and

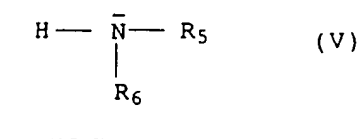
R₇ and R₈, independently of one another, are each hydrogen, alkyl, cycloalkyl, hydroxyalkyl, aminoalkyl, alkenyl, alkynyl, aryl, arylalkyl, alkylaryl or hetaryl or, together with the nitrogen atom to which they are bonded, form a heterocyclic structure,

or R₅ and R₆, together with the nitrogen atom to which they are bonded, form a heterocyclic structure, it being possible for each of the radicals R₅, R₆, R₇ and R₈ to be substituted by further alkyl radicals carrying hydroxyl or amino groups.

15. (amended) A polyalkene amine as defined in claim [26] 14, of the general formula [(IV)] (1), whose polyalkene portion is formed of C₂-C₄ alkene monomers.

16. (amended) A polyalkene amine as defined in claim [27] 15, wherein the C₂-C₄ alkene is 1-butene or isobutene.

18. (amended) A polyalkene amine as defined in claim [26] 14, wherein the amine portion is derived from a nitrogen compound of formula (V)



19. (amended) A polyalkene amine as defined in claim [30] 18, wherein the nitrogen compound is selected from ammonia, ethylene-1,2-diamine, propylene-1,2-

diamine, propylene-1,3-diamine, butylene diamines, the mono-, di- and trialkyl derivatives of said amines, polyalkylene polyamines, the alkylene portions of which do not have more than 6 carbon atoms, the N-amino-C₁-C₆-alkyl piperazine.

20. (amended) A polyalkylene amine as defined in claim [31] 19, which is derived from a polyalkene epoxide of the general formula (IV), the polyalkene portion of which is formed of 1-butene or isobutene monomers and the amine portion of which is derived from ammonia.

21. (amended) A fuel composition containing at least a polyalkene amine defined in claim [26] 14 in a concentration of about 20 to 5000 mg/kg of fuel as an additive for keeping the fuel intake system clean.

22. (amended) A lubricant composition containing as an additive at least one polyalkene amine as defined in claim [28] 16 in a proportion of about 1 to 15% by weight, based on the total weight of the composition.